

### **REMARKS/ARGUMENTS**

The Applicants respectfully request reconsideration in light of the amendment made above and the arguments made below. Claims 1-10 and 23-32 were pending. Within the Office action, claims 1-10 and 23-31 are rejected under 35 U.S.C. § 112, second paragraph; and claims 1-10 and 23-32 are rejected under 35 U.S.C. § 103(a). By way of the above amendments, claims 1-11 and 27 have been amended. Accordingly, claims 1-10 and 23-32 are now pending.

#### **Rejections under 35 U.S.C. § 112, ¶ 2**

Within the Office action, claims 1-10 and 23-31 are rejected under 35 U.S.C. § 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicants regard as the invention. Specifically, it is stated that the limitation “the plurality of performance scores” in claim 1 lacks antecedent basis and that the limitation “potential percent improvement” in claim 27 is indefinite. Claims 1 and 27 have both been amended to overcome these rejections.

Claim 1 has been amended to replace “the plurality of performance scores” with “the plurality of application-specific performance scores,” a limitation that has antecedent basis. Claim 27 has been amended to replace “a potential percent improvement” with “a percent improvement,” a definite limitation. Accordingly, the rejections of claims 1 and 27 under 35 U.S.C. § 112, ¶ 2, should be withdrawn.

#### **Rejections under 35 U.S.C. § 103(a)**

##### *Claims 1-5, 7-10, 23-26, 30, and 31*

Within the Office Action, claims 1-5, 7-10, 23-26, 30, and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,981,055 to Ahuja et al. in view of U.S. Patent No. 6,963,575 to Sistanizadeh et al. The Applicants respectfully traverse these rejections.

Ahuja discloses a system for and method of routing traffic. As stated in the Office action, Ahuja does not disclose that a prefix corresponds to an application selectable from a plurality of applications or calculating a plurality of application-specific performance scores for a plurality of service provider access links, as recited in claim 1. Furthermore, Ahuja also does not disclose implementing a route update request according to a priority queue, wherein the route update

request corresponds to a superior performance score, as recited in claim 1.

Sistanizadeh is directed to wide area data communications that use regional networks for transporting IP-over-Ethernet on fiber. (Sistanizadeh, Abstract) Sections of Sistanizadeh cited in the Office action disclose a high-speed data network that supports services from text and voice over IP to broadband applications rich in multimedia content (id., col. 2, lines 16-23), as well as text, image, multimedia, audio, video, voice-telephony, and other types of communication (id., col. 2, lines 49-54). Sistanizadeh also discloses distinguishing between voice and video applications using IP addresses and UDP/TCP ports (id., col. 18, lines 25-42), isolating different categories of traffic, and assigning trunk bandwidth to each category of traffic using a Quality of Service (QoS) (id., col. 19, line 57, to col. 20, line 33). In short, Sistanizadeh discloses assigning bandwidth based on a type of traffic, thereby assuring QoS. But this is not the same as calculating application-specific performance scores and routing data based on these scores, as recited in claim 1.

Sistanizadeh does not disclose implementing a route update request according to a priority queue, wherein the route update request corresponds to a superior performance score, as recited in claim 1. Sistanizadeh also does not disclose calculating a plurality of application-specific performance scores that each indicates performance for an application, as also recited in claim 1.

Claim 1 is directed to a method of routing a data flow traversing one or more routers in an internetwork. The one or more routers are coupled to a plurality of service provider access links (SPALs). The method recites, in part, determining a prefix for the data flow, wherein the prefix corresponds to an application selectable from a plurality of applications, calculating a plurality of application-specific performance scores for the plurality of SPALs, and implementing a route update request according to a priority queue, wherein the route update request corresponds to the superior performance score. Neither Ahuja nor Sistanizadeh, either alone or in combination, discloses calculating application-specific performance scores, determining a prefix for a data flow, wherein the prefix corresponds to an application selectable from a plurality of applications, or implementing a route update request according to a priority queue, wherein the route update request corresponds to a superior performance score. For at least these reasons, claim 1 is allowable over Ahuja, Sistanizadeh, and their combination.

Claims 2-5, 7-10, 23-26, 30, and 31 all depend from claim 1, and are thus all allowable as depending on an allowable base claim.

Claims 7 and 8 are allowable for additional reasons. Claims 7 and 8 recite that application-specific performance scores are customized for video traffic and Voice over IP (VoIP) traffic, respectively. In its ordinary and customary usage, “customize” means “to modify or build according to individual or personal specifications or preference.” Random House Unabridged Dictionary 494 (2d. ed. 1993). The original application, at page 15, lines 1-19, teaches customizing performance scores by selecting parameters (alpha, beta, gamma, theta, phi, omega, and psi) so that the scores accurately reflect performance for each application: different models are generated for each type of traffic. As explained at page 14, lines 24-26, of the original application, parameters may be selected to allow different optimization goals for each group. Neither Ahuja nor Sistanizadeh discloses “customizing” scores in any way, let alone as recited in claims 7 and 8. For at least this additional reason, claims 7 and 8 are also allowable over Ahuja, Sistanizadeh, and their combination.

*Claim 6*

Within the Office action, claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ahuja, in view of Sistanizadeh, and further in view of U.S. Patent No. 6,981,055 to Gossett Dalton, Jr., et al. The Applicants respectfully traverse this rejection.

Gossett Dalton, Jr., is directed to “a centralized routing engine that is able to assist gateways in making routing decisions for calls being placed in an IP network environment.” (Gossett Dalton, Jr., Abstract) Gossett Dalton, Jr., discloses a source gateway 108 coupled to a service point 112 that provides routing assistance for a telephone call. At column 9, lines 39-51, cited within the Office action, Gossett Dalton, Jr., merely discloses that a service point 112 can provide three forms of access, and that HTTP is available for all types of service. While Gossett Dalton, Jr., may disclose making HTTP available for all types of service, it does not disclose that performance scores are “customized” for HTTP traffic, as recited in claim 6. The two are not the same. As explained above, Ahuja and Sistanizadeh also do not disclose that performance scores are customized for any type of traffic, let alone HTTP traffic. For this reason, claim 6 is allowable over Ahuja, Sistanizadeh, Gossett Dalton, Jr., and their combination.

Claim 6 is also allowable because it depends from claim 1, an allowable base claim. Like Ahuja and Sistanizadeh, Gossett Dalton, Jr., also does not disclose determining a prefix for data flow, calculating a plurality of application-specific performance scores for a plurality of service provider access links, or implementing a route update request according to a priority queue, all as recited in claim 1. For at least these reasons, claim 1 is allowable over Ahuja, Sistanizadeh,

Gossett Dalton, Jr., and their combination. Accordingly, because claim 6 depends on claim 1, it is also allowable as depending on an allowable base claim.

*Claims 27-29 and 32*

Within the Office action, claims 27-29 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ahuja in view of Sistanizadeh, and further in view of U.S. Patent App. Pub. No. 2005/0201302 A1 to Gaddis et al. The Applicants respectfully traverse these rejections.

Ahuja and Sistanizadeh have been characterized above. Gaddis is directed to managing the routing of traffic by developing a topological address space map. (Gaddis, Abstract) In not one of the sections cited in the Office action does Gaddis disclose using a percent improvement as recited in claim 27: At paragraph [0070], Gaddis discloses “calculat[ing] the percentage of traffic with a certain IP address and mask that arrives on each particular interface,” to thereby develop an address space map of an ISP’s network; at paragraph [0118], Gaddis discloses status flags; at paragraph [0176], Gaddis discloses producing routes to be announced and routes to be withdrawn; and at paragraph [0177], Gaddis again discloses the use of status flags. While Gaddis discloses calculating a *percentage of traffic*, Gaddis does not disclose a rank dependent on a *percent improvement of a performance score*, as recited in claim 27.

Claim 27 is directed to a method of routing from a source node to a group of destination nodes having a common prefix. Claim 27 recites, in part, implementing a route update request according to a priority queue. The route update request corresponds to a superior performance score, and a rank of the update request for a prefix in a priority queue is dependent on a percent improvement of a performance score resulting from moving the prefix from its current route to a pending winner route. Not one of Ahuja, Sistanizadeh, and Gaddis discloses that a rank of the update request for a prefix in a priority queue is dependent on a percent improvement of a performance score resulting from moving the prefix from its current route to a pending winner route. For at least this reason, claim 27 is allowable over Ahuja, Sistanizadeh, Gaddis, and their combination.

Claims 28-31 all depend on claim 27 and are thus all allowable as depending on an allowable base claim.

As to claim 32, within the Office action, it is stated that Gaddis discloses “wherein a performance score from the plurality of performance scores is determined by unpacking the group into component prefixes and generating performance scores for each of the component

prefixes in the event a change in a performance score for the group above a threshold is determined [i.e. above a certain threshold] [ paragraphs 0118, 0147, 0150, 0156 and 0161].” This mischaracterizes Gaddis. At most, Gaddis discloses preferencing a route if enough traffic is associated with it. Specifically, Gaddis discloses that a preference threshold “is set in terms of percentage of total traffic from a particular route group (measured in packets or bytes)” (Gaddis, ¶ [0161]). Thus, the “percent” that Gaddis discloses is a percent of *traffic*, used to determine whether to preference a route. Gaddis does not disclose using an amount a *performance score* exceeds a threshold, as recited in claim 32.

Claim 32 is directed to a method of routing from a source node to a group of destination nodes having a common prefix. Claim 32 recites, in part, generating a plurality of performance scores for a plurality of routes from the source node to the group of destination nodes. Each performance score corresponds to an access link from one or more access links. A performance score from the plurality of performance scores is determined by unpacking the group into component prefixes in the event a change in a performance score for the group above a threshold level is determined and generating performance scores for each of the component prefixes. Not one of Ahuja, Sistanizadeh, and Gaddis discloses unpacking a group into component prefixes in the event a change in a performance score for the group above a threshold level is determined and generating performance scores for each of the component prefixes. For at least this reason, claim 32 is allowable over Ahuja, Sistanizadeh, Gaddis, and their combination.

#### **Consideration of an IDS filed August 11, 2005**

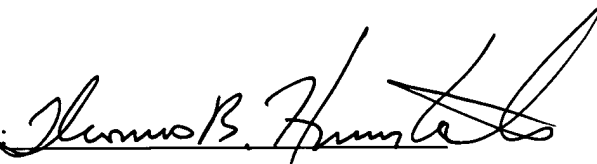
The Applicants ask that the Examiner consider the references filed with a Supplemental Information Disclosure Statement August 11, 2005. The Applicants also ask that the Examiner return an initialed and dated copy of the Supplemental IDS. A copy of the Supplemental Information Disclosure Statement, with the USPTO processing stamps, is attached as an Appendix.

**CONCLUSION**

For the reasons given above, the Applicants respectfully submit that claims 1-10 and 23-32 are in condition for allowance, and allowance at an early date would be appreciated. If the Examiner has any questions or comments, the Examiner is encouraged to call the undersigned at (408) 530-9700 so that any outstanding issues can be quickly and efficiently resolved.

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

Dated: 12-26-07

By:   
Thomas B. Haverstock  
Reg. No.: 32,571  
Attorneys for Applicants

Attachment (6 pages)



2154  
AR/CRW

PATENT  
Attorney Docket No.: AVARS-02201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 2154
Omar C. Baldonado et al.	)	Examiner: Nicholas A. Martin
Serial No.: 09/923,924	)	<b><u>TRANSMITTAL LETTER</u></b>
Filed: August 6, 2001	)	162 N. Wolfe Road
For: <b>METHOD AND APPARATUS FOR</b>	)	Sunnyvale, CA 94086
<b>PERFORMANCE AND COST</b>	)	(408) 530-9700
<b>OPTIMIZATION IN AN</b>	)	Customer No. 28960
<b>INTERNETWORK</b>	)	

MS: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

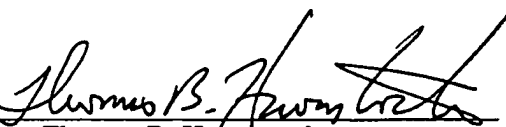
Sir:

Enclosed please find a Supplemental Information Disclosure Statement, a Certification pursuant to 37 C.F.R. § 1.97(e) for the Information Disclosure Statement, and Form PTO-1449, including copies of the references contained thereon, for filing in the U.S. Patent and Trademark Office.

The Commissioner is hereby authorized to charge any additional fee or credit overpayment to our Deposit Account No. 08-1275. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Respectfully submitted,  
HAVERSTOCK & OWENS LLP


Dated: 8-11-05

By:   
Thomas B. Haverstock  
Reg. No.: 32,571

Attorneys for Applicants

CERTIFICATE OF MAILING (37 CFR § 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.  
Date: 8/11/05 By: 



PATENT  
Attorney Docket No.: AVARS-02201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 2154
Omar C. Baldonado et al.	)	Examiner: Nicholas A. Martin
Serial No.: 09/923,924	)	
Filed: August 6, 2001	)	<b><u>CERTIFICATION FOR</u></b>
	)	<b><u>SUPPLEMENTAL INFORMATION</u></b>
	)	<b><u>DISCLOSURE STATEMENT UNDER 37</u></b>
	)	<b><u>CFR § 1.97(e)</u></b>
For: <b>METHOD AND APPARATUS FOR</b>	)	
<b>PERFORMANCE AND COST</b>	)	162 N. Wolfe Road
<b>OPTIMIZATION IN AN</b>	)	Sunnyvale, CA 94086
<b>INTERNETWORK</b>	)	(408) 530-9700

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P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This certification is being made for the Supplemental Information Disclosure Statement accompanying this certification.

**Certification**

I, the person signing below, hereby certify that the printed publications contained in the enclosed supplemental information disclosure statement were cited within an Official Action mailed on May 25, 2005. Accordingly, I hereby certify that no reference contained within this supplemental information disclosure statement was cited in a communication from a foreign patent office in a related foreign application, and, to the knowledge of the person signing the statement, after making reasonable inquiry, no reference contained within this supplemental information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this supplemental information disclosure statement. 37 C.F.R. 1.97(e)(2).



**Identification of Person Making Certification**

The person making this certification is the attorney who signs below on the basis of the information in the attorney's file.

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

Dated: 8-11-05

By: Thomas B. Haverstock  
Thomas B. Haverstock  
Reg. No.: 32,571

Attorneys for Applicants

**CERTIFICATE OF MAILING (37 CFR § 1.6(a))**

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HAVERSTOCK & OWENS LLP.  
Date: 8/11/05 By: [Signature]



PATENT  
Attorney Docket No.: AVARS-02201

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In re Application of:	)	Group Art Unit: 2154
Omar C. Baldonado et al.	)	Examiner: Nicholas A. Martin
Serial No.: 09/923,924	)	<b><u>SUPPLEMENTAL INFORMATION</u></b>
Filed: August 6, 2001	)	<b><u>DISCLOSURE STATEMENT</u></b>
For: <b>METHOD AND APPARATUS FOR</b>	)	162 N. Wolfe Road
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<b>OPTIMIZATION IN AN</b>	)	(408) 530-9700
<b>INTERNETWORK</b>	)	

MS: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The citations listed below, copies attached, may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. §§ 1.56 and 1.97. The Examiner is requested to make these citations of official record in this application.

Applicants have become aware of the following printed publication which may be material to the examination of this application:

- U.S. Patent No. 5,361,256;
- U.S. Patent No. 6,728,777 B1;
- U.S. Patent No. 6,728,779 B1;
- U.S. Patent No. 6,829,221 B1;
- U.S. Patent No. 2003/0191841 A1;
- R. Govindan et al., "Heuristics for Internet Map Discovery", USC/Information Sciences Institute, pp. 1-11; and
- A. Feldmann et al., "Deriving Traffic Demands for Operational IP Networks: Methodology and Experience", pp. 1-14.

PATENT  
Attorney Docket No.: AVARS-02201

This Supplemental Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that anyone or more of these citations constitutes prior art.

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

Dated: 8-11-05

By: Thomas B. Haverstock  
Thomas B. Haverstock  
Reg. No.: 32,571

Attorneys for Applicants

**CERTIFICATE OF MAILING (37 CFR § 1.8(a))**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

- 2 -

HAVERSTOCK & OWENS LLP.  
Date: 8/11/05 By: [Signature]

FORM PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No.: AVARS-02201	Serial No.: 09/923,924	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary)				Applicants: Omar C. Baldonado et al.		
(37 CFR § 1.98(b))				Filing Date: August 6, 2001	Group Art Unit: 2154	

U.S. PATENT DOCUMENTS							
Examiner Initials		Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
	AA	5,361,256	11/01/94	Doeringer et al.	370	60	05/27/93
	AB	6,728,777 B1	04/27/04	Lee et al.	709	238	06/02/00
	AC	6,728,779 B1	04/27/04	Griffin et al.	709	239	05/31/00
	AD	6,829,221 B1	12/07/04	Winckles et al.	370	238	12/27/99
	AE	2003/0191841 A1	10/09/03	DeFerranti et al.	709	226	05/15/01
	AF						
	AG						
	AH						
	AI						
	AJ						

FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS								
		Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation	
							Yes	No
	AK							
	AL							
	AM							
	AN							
	AO							

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)	
AP	R. Govindan et al., "Heuristics for Internet Map Discovery", USC/Information Sciences Institute, pp. 1-11.
AQ	A. Feldmann et al., "Deriving Traffic Demands for Operational IP Networks: Methodology and Experience", pp. 1-14.
AR	
AS	
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Examiner:	Date Considered:
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EXAMINER:	Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
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